PROCEEDINGS OF THE BIOLOGICAL SOCIETY OF WASHINGTON

A NEW EURYTHRIPS FROM VIRGINIA (Thysanoptera, Phlaeothripidae)

By J. Douglas Hood

The new species described below has been known to the writer for more than ten years, but its description has been postponed in the hope that the long-winged form could first be discovered. However, in the course of revising his manuscript key to the known species, it seemed desirable to incorporate it because of its distinctness, and to give it a name.

Eurythrips virginianus sp. nov.

Female, forma brachyptera.—Length about 1.6 mm. (fully distended, 1.9 mm.). Color yellow, with abdomen shaded with brown basally in at least segments II and III, and again apically in the last few segments, the tube always brown but paler at base and apex, the intermediate abdominal segments often bright yellow but occasionally (apparently in older individuals) shaded with brown laterally, the pterothorax more or less brownish along sides; internal pigmentation carmine-red; legs wholly pale yellow; antennae light brown in segments I, II, and VI-VIII, I yellow basally, II yellow apically, III pale yellow in about basal three-fourths, IV and V yellow in about basal third, gray beyond, VI yellow in pedicel, VII and VIII successively darker; all major setae of head, thorax, and abdomen yellow, the terminal setae somewhat darker, brownish.

Head (Fig. 1) about 1.3 times as long as greatest width across cheeks and a little less than 1.5 times as long as the width across eyes, very slightly produced in front of latter, the length in front of eyes about 37 \mu, the lateral length of the produced part (between eyes and antennae) about 9 \mu, its greatest width 83 \mu, its least width 77; frontal costa concave, 164 wide; cheeks swollen at middle, conspicuously and roundly converging to eyes and roundly narrowed to basal collar, usually with a small angulation or tooth behind eyes, polygonally reticulate across base and along sides, more lightly so in ocellar area; postocular setae dilated at tip, about 52 µ long, 103 apart, and about 13 from nearest facet of eyes; postocellar and interocellar setae minute, other cephalic setae small and pointed; vertex slightly produced, almost overhanging. Eyes rounded, moruloid, protruding, coarsely facetted, their length about 0.26 that of head, in holotype measuring 46 \mu in length dorsally, dorsal width 35, dorsal interval 67. Ocelli 16-17 \mu in diameter, the median one with its anterior margin on a line with insertion of antennae, the posterior ones about 30 \mu apart and 20 from median ocellus. Antennae (Fig. 2) slender, more than twice the length of head, pedicels of the apical segments not flared at base, VIII long, almost fusiform, with narrow pedicel; setae pointed or nearly so, excepting the two near apex of dorsum of segment III, these distinctly knobbed; sense-cones slender and nearly pointed, III 1 (1), IV 1 (2), V 1 (1⁺¹), VI 1 (1⁺¹), VII 1 dorsal. Mouth-cone short, semicircularly rounded at tip, extending about 83 μ beyond posterior dorsal margin of head when the latter is horizontal.

Prothorax normal, median length of pronotum about 0.62 that of head and contained in the trans-coxal width about 2.1 times, its dorsal surface without sculpture excepting for a few very faint striae paralleling lateral margins and several, more distinct ones near posterior margin; epimeron largely or almost wholly fused with pronotum; all major setae arising from slight eminences, with colorless dilated tips, the antero marginals minute, pointed, and 4-6 μ long, the antero-angulars 48, midlaterals 46, epimerals 55, postero-marginals 51, coxals 34 (in holotype). Pterothorax somewhat narrower than prothorax, without ventro-lateral knobbed setae. Legs roughened by sculpture, the femora with heavy, anastomozing cross-lines; fore tarsi with a minute tooth arising near apex of first segment. Wings reduced to small pads (about 64 μ long), with either one or two major setae, these dilated at tip and 39-48 μ long.

Abdomen moderately large and heavy, fully 1.5 times as broad as prothorax across coxae; all terga largely but rather faintly polygonally reticulate, the more lateral lines often asperate; terga I-VII without large submedian pores, II without subbasal line, this line on III-VIII without pores; all major setae, excepting III on IX and the terminal ones, similar to postoculars and those on prothorax, dilated at tip, seta I on IX (in holotype) 81 μ , II 87, III 103, the terminal ones 93. Tube (segment X, only) not strongly constricted at tip, sides slightly concave beyond the somewhat swollen base, its length two-thirds that of head and about 1.8 times its greatest subbasal width, the latter nearly 2.2 times the apical width.

Measurements of female (holotype), in mm.: Length about 1.60 (fully distended, 1.93); head, total length 0.200, width across eyes 0.137, least width just behind eyes 0.120, greatest width across cheeks 0.153, least width near base (in front of basal collar) 0.134; prothorax, median length of pronotum 0.124, width (inclusive of coxae) 0.263; mesothorax, width across anterior angles 0.246; abdomen, greatest width (at segment IV) 0.407; tube (segment X, only), length 0.133, greatest subbasal width 0.073, width across basal collar 0.075, least apical width 0.034.

| Antennal segments | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|----------------------|----|----|----|----|----|----|----|----|
| Length (µ) | 44 | 54 | 68 | 60 | 60 | 54 | 45 | 42 |
| Width (µ) | 40 | 34 | 30 | 29 | 26 | 24 | 21 | 13 |
| Total length of ante | | | | | | | | |

Male (brachypterous).—Smaller and more slender than female, and colored like that sex; fore tarsal tooth small, pointed, arising from apex of first segment; glandular area on sternum VIII of abdomen forming a complete narrow transverse band close to anterior margin, its width (longitudinally) 10-14 μ ; seta II on segment IX reduced in size.

Measurements of male (allotype), in mm.: Length about 1.30 (fully distended, 1.55); head, total length 0.183, width across eyes 0.121, least width just behind eyes 0.103, greatest width across cheeks 0.134, least width near base (in front of basal collar) 0.123; width of frontal costa 0.014; greatest width between eyes and antennae 0.072, least width 0.068; eyes, dorsal length 0.042, dorsal width 0.033, dorsal interval

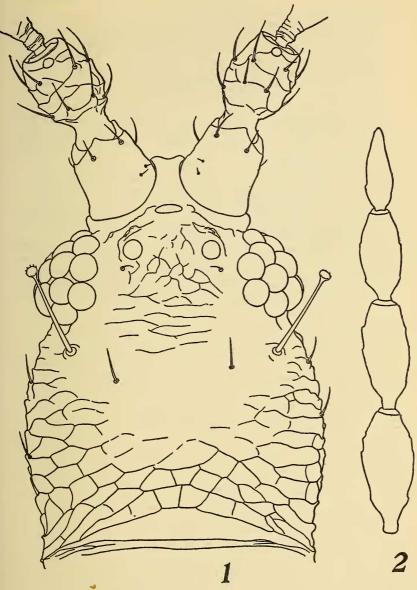


PLATE IV

Eurythrips virginianus sp. nov., 9, holotype

Fig. 1.—Head and first two antennal segments. Fig. 2.—Segments V-VIII, right antenna.

(Camera lucida; J. D. H.)

0.056; median ocellus, diameter 0.012; posterior ocelli diameter 0.010, interval 0.020, distance from median ocellus 0.010; postocular setae, length 0.043, interval 0.091, distance from eyes 0.016; mouth cone, length beyond posterior dorsal margin of head 0.064; prothorax, median length of pronotum 0.118, greatest width (inclusive of coxae) 0.245; antero-marginal setae, length 0.007, antero-angulars 0.038, midlaterals 0.040, epimerals 0.048, postero-marginals 0.050, coxals 0.031; pterothorax, width across anterior angles 0.210; wingpads, length 0.061, lengths of setae 0.043 and 0.043, respectively; abdomen, greatest width (at segment IV) 0.296; tube (X, only), length 0.110, greatest subbasal width 0.062, least apical width 0.030; seta I on segment IX 0.076, II 0.036, III 0.107; terminal setae, length 0.088.

| Antennal segments | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|--------------------|------|-------|-----|-----|----|----|----|----|
| Length (µ) | 42 | 49 | 60 | 56 | 53 | 48 | 39 | 39 |
| Width (µ) | 35 | 30 | 27 | 26 | 24 | 22 | 20 | 13 |
| Total length of an | tenn | a. 0. | 386 | mm. | | | | |

VIRGINIA: New Market, March 16, 1941, Dr. Lincoln C. Pettit, 7 9's and 18, from dead leaves on ground.

E. virginianus belongs with those reticulated species which have the head nearly free of such reticulation between, and for a short distance behind, the postocular setae. From them it may readily be known by the presence on the third antennal segment of only one sense-cone on the outer surface and of two knobbed dorsal apical setae, as well as by the relatively short postocular and other setae.